

mm



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/738,309	12/18/2000	Sehjoon Dokko	P-156	2257
34610	7590	02/07/2005	EXAMINER	
FLESHNER & KIM, LLP P.O. BOX 221200 CHANTILLY, VA 20153			IQBAL, KHAWAR	
			ART UNIT	PAPER NUMBER
			2686	

DATE MAILED: 02/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/738,309

Applicant(s)

DOKKO, SEHJOON

Examiner

Khawar Iqbal

Art Unit

2686

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12-20-05.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 6-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14 is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-4,6-10 and 14 rejected under 35 U.S.C. 103(a) as being unpatentable over Davidson (6483820) and further in view of Ibaraki et al (6590865).

Regarding claim 1 Davidson teaches a method for allocating channels for radio data calls comprising (figs. 1-5):

receiving a data call connection request (col. 4, lines 12-30);

determining a traffic attribute of the data call (col. 4, lines 12-60);

determining an occupied bandwidth of each of a plurality of channels of a transmission link occupied by other connected calls (col. 4, lines 12-60,col. 5, lines 1-45); and

dynamically allocating the data call among the plurality of channels based on the traffic attribute and the occupied bandwidth (col. 4, lines 12-60,col. 5, lines 1-45,col. 6, lines 12-65). Davidson does not specifically teach wherein a mobile switching system subtracts an occupied channel bandwidth from a maximum allowable channel bandwidth to determine whether there is a minimum available bandwidth in each channel, and allocates the channel having the least occupied bandwidth if no channel has the minimum available bandwidth.

Art Unit: 2686

In an analogous art, Ibaraki et al discloses a bandwidth allocation teaching in witch as approaches wherein a mobile switching system subtracts an occupied channel bandwidth from a maximum allowable channel bandwidth to determine whether there is a minimum available bandwidth in each channel, and allocates the channel having the least occupied bandwidth if no channel has the minimum available bandwidth col. 11, lines 21-56, col. 12, lines 9-61). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Davidson by specifically adding feature in order to enhance system performance of the system purpose of allows bandwidth to be flexibly managed by reconsidering all Allocations as taught by Ibaraki et al.

Regarding claim 2 Davidson teaches wherein a bandwidth of the data call is determined based on the traffic attribute and the bandwidth occupied by the other connected data calls is determined based on a number of other data calls and prescribed weight values of each of the other data calls (col. 4, lines 12-60,col. 5, lines 1-45,col. 6, lines 12-65, also see claim 1).

Regarding claims 3 Davidson teaches wherein the weight value is allocated in a unit form according to a rate of the bandwidth (col. 4, lines 12-60,col. 5, lines 1-45,col. 6, lines 12-65, also see claim 1).

Regarding claim 6 Davidson teaches wherein the maximum allowable bandwidth is 30 units (col. 4, lines 12-60,col. 5, lines 1-45,col. 6, lines 12-65, also see claim 1).

Regarding claim 7 Davidson teaches a method for allocating channels for radio data calls comprising (figs. 1-5):

Art Unit: 2686

receiving a data call connection request (col. 4, lines 12-30);
determining a traffic attribute of the data call (col. 4, lines 12-60);
determining an occupied bandwidth of each of a plurality of channels of
a transmission link occupied by other connected calls (col. 4, lines 12-60,col. 5, lines 1-45); and

dynamically allocating the data call among the plurality of channels based on the traffic attribute and the occupied bandwidth (col. 4, lines 12-60,col. 5, lines 1-45,col. 6, lines 12-65), wherein a mobile switching system allocates a channel having the least available bandwidth if a requested bandwidth of the data call is greater than a prescribed bandwidth and the channel having an available bandwidth exists (col. 4, lines 12-60,col. 5, lines 1-45,col. 6, lines 12-65, also see claim 1).

Regarding claim 8 Davidson teaches a method for allocating channels for radio data calls comprising (figs. 1-5):

receiving a data call connection request (col. 4, lines 12-30);
determining a traffic attribute of the data call (col. 4, lines 12-60);
determining an occupied bandwidth of each of a plurality of channels of
a transmission link occupied by other connected calls (col. 4, lines 12-60,col. 5, lines 1-45); and

dynamically allocating the data call among the plurality of channels based on the traffic attribute and the occupied bandwidth (col. 4, lines 12-60,col. 5, lines 1-45,col. 6, lines 12-65), wherein a mobile switching system allocates a channel having the least occupied bandwidth if a requested bandwidth of the data call is smaller than a

Art Unit: 2686

prescribed reference bandwidth and the channel having an available bandwidth exists (col. 4, lines 12-60,col. 5, lines 1-45,col. 6, lines 12-65, also see claim 1).

Regarding claim 9 Basu et al teaches wherein the traffic attribute is determined based on a service option (col. 4, lines 12-60,col. 5, lines 1-45,col. 6, lines 12-65, also see claim 1).

Claims 10 rejected under 35 U.S.C. 103(a) as being unpatentable over Davidson (6483820) and further in view of Ibaraki et al (6590865) and Yee et al (20020114301).

Regarding claim 10 Davidson does not specifically teach E1 link.

In an analogous art, Yee et al teaches E1 link (paragraph # 0092). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Davidson by specifically adding feature E1 link to support the multimedia call in order to enhance system performance of the system purpose of increasing efficiency telecommunication system as taught by Yee et al.

Claim 4 rejected under 35 U.S.C. 103(a) as being unpatentable over Davidson (6483820) and further in view of Ibaraki et al (6590865) and Martin et al (5960039).

Regarding claim 4 Davidson does not specifically teach 128 Kbps-based high speed data call comprises 10 units. In an analogous art, Martin et al teaches 128 Kbps-based high speed data call comprises 10 units (col. 7, lines 7-26). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Davidson by specifically adding feature 128 Kbps-based high speed data to support the multimedia call in order to enhance system performance of the system purpose of increasing efficiency as taught by Martin et al.

Allowable Subject Matter

3. Claim 14 is allowed. The following is a statement of reasons for the indication of allowable subject matter: Claim 14 is allowable (with others combinations) over the prior art of record since the cited references taken individually or in combination fails to particularly teach allocating an H.sub.0 channel having the least available bandwidth if the requested bandwidth is greater than the reference bandwidth and a H.sub.0 channel having available bandwidth exists; and allocating a H.sub.0 channel having the least occupied bandwidth if the requested bandwidth is smaller than the reference bandwidth and a H.sub.0 channel having available bandwidth exists.

Response to Arguments

4. Applicant's arguments with respect to claims 1-4,6-10 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KHAWAR IQBAL whose telephone number is 703-306-3015.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **BANKS-HAROLD, MARSHA**, can be reached at 703-305-4379.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Art Unit: 2686

Washington, D.C. 20231


or faxed to:

(703) 872-9314 (for Technology Center 2684 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Khawar Iqbal


RAFAEL PEREZ-GUTIERREZ
PATENT EXAMINER
2/6/05